Laboratory for Theoretical Computer ScienceTutorial 2T-79.231 Parallel and Distributed Digital Systems3rd October 2003

1. Model the problem, presented in the lecture, of ferrying a goat, a cabbage and a wolf across a river with place/transition system. There is one boat, which can carry a ferry-man and either the goat, the cabbage or the wolf. If left unattended, the goat will eat the cabbage and the wolf will eat the goat. The boat can return empty, that is, with only the ferry-man riding the boat. The desired solution is the one where all the three passengers have got ashore to the other bank of the river.

How can we find the unwanted states from the model?

2. Perform complement construction for the following net:



3. Generate the coverability graph for the following nets. All places have unbounded capacities.

